

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Petition for Rulemaking filed by)	RM-11912
AURA Network Systems OpCo, LLC)	
and A2G Communications, LLC. to Transmit)	
Data on AGRAS Channels)	

**COMMENTS
OF THE
ENTERPRISE WIRELESS ALLIANCE**

The Enterprise Wireless Alliance (“EWA” or “Alliance”), in accordance with Section 1.405(a) of the Federal Communications Commission (“FCC” or “Commission”) rules, is pleased to submit comments in support of the above-identified Petition for Rulemaking (“PFR”) filed jointly by AURA Network Systems OpCo, LLC and A2G Communications, LLC on February 16, 2021 (“Petitioners”).¹ The FCC has already taken an essential step toward unleashing the full potential of the 454.675-454.975/459.675-459.975 MHz band authorized under Part 22 for Air-Ground Radio Telephone Automated Service (“AGRAS”). On January 14, 2021, the Commission granted waiver relief from certain AGRAS rules to Petitioners,² stating that doing so would allow them “to offer services that keep pace with technological innovation” and would permit this general aviation air-ground spectrum to be “optimized to the greatest extent possible.”³ That decision waived a number of operational and technical requirements that the FCC agreed were no longer appropriate or necessary and, in particular, authorized Petitioners to provide additional air-ground services, including service to unmanned aircraft systems (“UAS”) over their modernized,

¹ Consumer and Governmental Affairs Bureau, Reference Information Center, Petition for Rulemaking Filed, RM-11912, Report No. 3181 (rel. Aug. 25, 2021).

² See Request of AURA Network Systems OpCo, LLC and A2G Communications, LLC for Waiver, WT Docket No. 20-185 (filed June 12, 2020) (“Waiver Request”).

³ *AURA Network Systems OpCo, LLC and A2G Communications, LLC Request for Waiver*, WT Docket No. 20-185, Order, 36 FCC Rcd 262 at ¶ 12 (WTB MD 2021) (“Waiver Order”).

nationwide network. This relief, however, was conditioned on Petitioners meeting certain requirements, including an obligation to file the PFR seeking permanent rule changes consistent with the terms of the Waiver Order.

EWA and numerous other parties filed in support of the Waiver Request. These parties represent a wide range of users, including business enterprise, utilities, public safety, and other entities with a need for the type of UAS operations that could be deployed on this AGRAS spectrum. There is no question that UAS will play an increasingly important role in a variety of applications. They have the potential for producing substantial cost and time savings. Information that might take hours or days to collect if an individual needed to drive an area and take detailed notes of what was discovered can be obtained much more easily and with greater accuracy if acquired through use of UAS. They also have important safety advantages as they can venture into areas where it would be dangerous to send a human. For these reasons, the Alliance is pleased that the FCC has moved promptly to seek comment on the Petition and encourages it to proceed as expeditiously to adopt a Notice of Proposed Rulemaking consistent with the Petition and with the record developed in this proceeding.

I. THE AGRAS RULES SHOULD BE UPDATED, CONSISTENT WITH TECHNOLOGICAL NEEDS/ADVANCES AND WITH THE MODERNIZED NETWORK PETITIONERS HAVE DEPLOYED.

As noted in the Waiver Order and in the PFR, Petitioners already have invested in the deployment of a network that can provide modernized general aviation air-to-ground service from multiple sites throughout the country. This is a significant improvement over the outdated facilities that had been available for the voice communications originally envisioned for this service. Using up-to-date technology, the network will continue supporting that legacy service while also meeting the data communications needs of UAS operators. In fact, there is likely to be significant overlap in those two user communities. Entities that relied on voice AGRAS communications increasingly

are seeing their requirements evolve toward a more data-centric mode for which UAS in this band is well-suited. The rule amendments adopted in this proceeding should reflect the fact that advanced technology will allow subscribers to enjoy both capabilities on a single network. The rules should enable and even encourage Petitioners to utilize this very limited amount of spectrum efficiently by favoring flexibility, bounded by technical requirements that protect against interference to other services and users.

As an initial matter, EWA recommends that the FCC modify the AGRAS rules to incorporate all the relief granted in the Waiver Order. That includes not only the ability to provide service to UAS, but elimination of the channel policy rules that no longer serve a useful purpose, since a single entity will be providing service on a nationwide basis.⁴ The Alliance agrees these changes will produce “precisely the type of dynamic, efficient spectrum management [the FCC] envisioned when [it] originally granted waiver to Petitioners’ predecessor entities....”⁵ The rules should allow the licensing of network base stations wherever they are needed to address subscriber requirements, subject only to international arrangements and to the protection of co-channel systems in the highly unlikely event that Petitioners do not maintain exclusive use of these channels nationwide. The short-spacing of a licensee’s own facilities should be permitted freely under Section 22.813(a) since doing so affects no other party. The so-called “dispersion” rule in Section 22.813(b) limiting the number of AGRAS channels assignable within a defined area should be eliminated entirely as unnecessary in the context of a nationwide system.

The Commission also should delete the Section 22.817 requirement that only a single AGRAS channel may be requested in an application, and an additional channel may not be applied for until all previous channels have been constructed. As explained in the PFR, technology once

⁴ Waiver Order at ¶¶ 18-23.

⁵ *Id.* at ¶ 21.

again has advanced so that every radio in the new network is capable of operating on all channels that have been activated.⁶ There is no need to program subscriber radios on a channel-by-channel basis. It is not clear to the Alliance why the FCC retained that cumbersome licensing process⁷ in light of the other waiver relief granted, a process that imposes costs on both applicants and the FCC staff with no countervailing public interest benefit.⁸ It does not have a place in a modernized AGRAS licensing framework.

EWA also supports the other rule changes requested in the PFR. It agrees that there is no need for internal guard bands between the contiguous AGRAS channels. As opposed to those at band edges that satisfy OOB requirements, internal guard bands are another vestige of a licensing environment that presumed participation by multiple parties and of legacy technology that was not designed to take maximum advantage of channel bandwidth rather than channels on an individual basis.⁹ The adoption of more flexible rules in other services has been instrumental in the introduction of highly efficient, digital technologies that support more intensive use of the total bandwidth. That same flexibility should be authorized in this band.

The Waiver Order limited relief from the Section 22.809 minimum power requirements to base stations and mobiles deployed in UAS operations only.¹⁰ The rule itself is a regulatory outlier. FCC rules typically limit the maximum power at which equipment may operate as a means of controlling potential interference to other licensees. This rule demands that heavier equipment be used even if lighter equipment has been developed that is fully capable of serving identical subscriber needs. The PFR recommends modification of the rule to allow operation at power levels consistent with the demands of the service.¹¹ EWA agrees that appropriate power levels in this

⁶ PFR at 14.

⁷ Waiver Order at ¶ 25.

⁸ See PFR at 14-15.

⁹ *Id.* at 10-11.

¹⁰ Waiver Order at ¶ 17.

¹¹ PFR at 11-12.

and other bands should be determined by the network operator based on its knowledge of subscriber requirements and system capabilities, with FCC rules limited to those necessary to protect against interference to other licenses and/or services.

II. CONCLUSION

There already is an extensive record in support of adding provision of service to UAS to the permitted operations on AGRAS spectrum. The Alliance expects the same support will be exhibited for adoption of rule changes consistent with the waiver relief granted previously and with the additional modifications proposed in the PFR.

It is understandable that much of the FCC's attention is focused on spectrum bands with the ability to deliver broadband capabilities to consumers. EWA encourages the Commission also to devote appropriate resources to proceedings such as this that promise to retool an historically underutilized band to meet modern communications needs.

Respectfully submitted,

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